

#83003

ASTERIAS 83-03 CRUISE REPORTVessel: R/V ASTERIASCruise: AST 83-03Dates: 9-19 June 1983Survey Area: Penobscot Bay, Maine

Personnel: Dick Colburn (WHOI), Captain
 Greg Miller (USGS), Technician (11-17 June) 7
 Dave Nichols (USGS), Technician (15-19 June) 5
 Harley Knebel (USGS), Chief Scientist (11-14 June) 4
 Kathy Scanlon (USGS), Geologist (11-14 June) 4
 Chief Scientist (15-17 June) 3

Project: Coastal, Estuarine, and Lacustrine Studies (9470-02421),
 funded by USGS-SIR

R/V ASTERIAS left Woods Hole for Camden, Maine on 9 June 1983 with Capt. Colburn onboard. Greg Miller, Harley Knebel, and Kathy Scanlon drove to Camden on 10 June, meeting ASTERIAS at Willey's Wharf in the evening. The purpose of the cruise was to define the geologic and geophysical characteristics of the bottom and subbottom sediments of Penobscot Bay. To that end we began surveying with the EG&G Uniboom seismic profiling system on the morning of 11 June and continued each day through 17 June. On 13 June we began running the EDO sidescan-sonar system on selected lines. On the evening of 14 June Harley Knebel got off ASTERIAS, turning the Chief Scientist's duties over to Kathy Scanlon, and Dave Nichols joined us.

LORAN-C time delays received by a Northstar 6000 unit and printed out and taped by a TI Silent 700 were used as the primary means of navigation. Capt. Colburn made frequent checks on our position using radar "distances off" and navigational buoys. After the cruise, the LORAN-C time delays that were recorded by the Northstar unit were calibrated by Barry Irwin against positions from the NOS chart of the bay; appropriate ASF corrections were applied to the recorded time delays.

Equipment malfunctions were few and, thanks to the technical staff, of short duration. The Uniboom and sidescan data were recorded on paper by flat-bed recorders. All of the Uniboom data (except for 5 hours on 13 June) were also recorded on analog tape.

We spent the nights of June 10, 12, 14, 16, and 17 tied up at Willey's Wharf in Camden, Maine. The nights of June 11, 13, and 15 we anchored in convenient coves. On 18 June Greg Miller and Kathy Scanlon drove from Camden to Woods Hole, while Capt. Colburn and Dave Nichols set out in ASTERIAS. They arrived in Woods Hole on the morning of 19 June.

Tabulated information:

Days at sea:	4 days mobilization and transit
	7 days surveying
Data collected:	243 kilometers of Uniboom
	71 kilometers of sidescan

131 NM
38 NM

